

CASE STUDY - INTERNATIONAL AIRLINE

How one leading international airline empowered employees to lower their high blood pressure



Background

A leading international airline based in the U.S. was interested in making a sizable impact on the health of their employees. They analyzed claims for their health plan members (including nearly 60,000 U.S. employees, as well as their spouses and adult dependents) and found that heart disease and high blood pressure were their most prevalent conditions. This assessment aligns with U.S. trends:

47% of adults have hypertension¹

79% of individuals with hypertension do not have the condition under control²

Accordingly, the airline sought a best-in-class solution to help their hypertensive members lower their blood pressure.

Solution

To improve member heart health, the airline selected the Hello Heart program. Hello Heart is the only digital therapeutics company to focus exclusively on heart health. Built by a team of clinicians, data scientists, and consumer software experts, Hello Heart's coaching app provides wellness tips that have been clinically shown in a peer-reviewed study published in a top-tier medical journal to lower blood pressure.³ Each participant receives a wireless blood pressure monitor and real-time personalized digital coaching. Hello Heart's artificial intelligence and algorithms drive an individualized, unique experience for each person based on gender, comorbidities, age, geography, and user persona.

After consulting with the Hello Heart team, the airline targeted approximately 18,000 at-risk members with blood pressure readings above 130/80 and/or a prescription for blood pressure medication.

Key First Year Results Based on Hello Heart Data

71%

average engagement rate throughout the program⁴

84%

of participants starting in stage 2 hypertension reduced their heart risk using the app^{4,5,6,7}

19 mmHg

drop in systolic blood pressure for participants starting in stage 2 hypertension using the app^{4,5,6}

148

members had an elevated blood pressure reading in the hypertensive crisis range and returned to a lower level using the app⁴

Approach

The enrollment process was simple and effective, including in-person enrollment events that detailed how eligible members could access the monitor and app, as well as other communications throughout the year. 24% of the company's targeted population, enrolled during the first year.⁴

Health Plan Integrations

Training: Hello Heart trained on-site nurses on the program and enrollment

Referrals: Hello Heart referred out to on-site nurses and health plan care managers

The health plan referred cardiovascular disease discharge cases to Hello Heart

On-site events: Hello Heart and the health plan participated in joint on-site events

Hello Heart's private and personal approach to coaching kept users engaged long term. 86% of the company's members engaged with the app's daily personalized insights.⁴ Additionally, the company's benefits team collaborated with Hello Heart to integrate with the health plan's clinical resources, as well as develop a rewards program for participants who actively engaged with the Hello Heart app. The rewards could be used to offset future healthcare expenses.

These efforts drove a high engagement rate, with an average of 71% of enrollees engaging with the app (e.g., tracking their blood pressure, weight, and/or steps; reading insights) each quarter.⁴

Results

Using the personalized coaching app's wellness tips focused on exercise, nutrition, and other lifestyle factors, 84% of participants starting in stage 2 hypertension reduced their blood pressure and lowered their heart risk after one year.^{4,5,6} On average, they dropped their systolic blood pressure by 19 mmHg.^{4,5} Additionally, 148 members had a blood pressure reading of 180/120 or greater (hypertensive crisis level) but then their blood pressure fell to a lower range.⁴



Risk Reduction: One study found that even a 10 mmHg reduction in systolic blood pressure reduced the risk of major cardiovascular disease events by **20%**, coronary heart disease by **17%**, stroke by **27%**, heart failure by **28%**, and all-cause mortality by **13%**.⁸

Beyond these clinical outcomes, the airline has potentially avoided significant medical costs since implementing Hello Heart. Validation Institute recently found in an analysis that the Hello Heart program delivered a \$1,865 per participant reduction in year 1 total medical claims.⁹

Based on these strong first year results, the airline has continued to offer the Hello Heart program for 5 years.



ValidationInstitute

\$1,865
reduction

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¹ Facts About Hypertension. CDC Web site. <https://www.cdc.gov/bloodpressure/facts.htm>. Published September 27, 2021. Accessed May 6, 2022.

² Estimated Hypertension Prevalence, Treatment, and Control Among U.S. Adults. Million Hearts Web site. <https://millionhearts.hhs.gov/data-reports/hypertension-prevalence.html>. Published March 22, 2021. Accessed May 6, 2022.

³ Gazit T, Gutman M, Beatty AL. Assessment of Hypertension Control Among Adults Participating in a Mobile Technology Blood Pressure Self-management Program. *JAMA Netw Open*. 2021;4(10):e2127008. <https://doi.org/10.1001/jamanetworkopen.2021.27008>. Accessed May 6, 2022. (Some study authors are employed by Hello Heart. Because of the observational nature of the study, causal conclusions cannot be made. See additional important study limitations in the publication.)

⁴ Based on data on file at Hello Heart. Results may vary from employer to employer.

⁵ Based on a comparison of users' average blood pressure level in their first week in the program compared to the end of their first year in the program. There were 215 participants with baseline blood pressure over 140/90 who had been enrolled in the program for one year and recorded blood pressure readings between weeks 48 and 55 of their time in the program.

⁶ Stage 2 hypertension is defined as blood pressure equal to or above 140/90.

⁷ Reduced heart risk is defined as a reduction in blood pressure.

⁸ Ettehad D, Emdin CA, Kiran A, Anderson SG, Callender T, Emberson J, et al. Blood pressure lowering for prevention of cardiovascular disease and death: a systematic review and meta-analysis. *Lancet*. 2016;387(10022):957-967. [https://doi.org/10.1016/S0140-6736\(15\)01225-8](https://doi.org/10.1016/S0140-6736(15)01225-8). Accessed May 6, 2022.

⁹ Validation Institute. 2021 Validation Report (Valid Through October 2022). https://validationinstitute.com/wp-content/uploads/2021/10/Hello_Heart-Savings-2021-Final.pdf. Published October 2021. Accessed May 6, 2022. (This analysis was commissioned by Hello Heart, which provided a summary report of self-funded employer client medical claims data for 203 Hello Heart users and 200 non-users from 2017-2020. Findings have not been subjected to peer review.)

